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LEE, RICHARD J

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 22

Application Number: 09/013,645  
Filing Date: January 26, 1998  
Appellant(s): Henderson et al

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**Technology Center 2830**

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David G. Parkhurst  
For Appellant

**SUPPLEMENTAL  
EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed August 16, 2001.

The basis for this supplemental Examiner's Answer is to clarify the grounds of rejection for claim 3 in view of the combination of Henderson et al and Baker et al. For the appellants' convenience, even though only claim 3 is clarified as shown in the below section (10), item (2), all other sections have been duplicated from the previous Examiner's Answer dated August 30, 2001. No new grounds of rejection have been presented.

Art Unit: 2613

**(1)    *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2)    *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3)    *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4)    *Status of Amendments After Final***

The first sentence under the Status of Amendments section of the brief should be: An amendment in reply to the Office Action of December 2, 1999 was filed March 7, 2000, canceling claims 4, 5, and 6, and amending claim 1. It is noted that though the appellants have indicated all amendments throughout prosecution of this case under this section of the brief, only the status of amendments after Final should be identified. And in the present case, the appellants have filed no amendments after the Final rejection dated March 15, 2001.

**(5)    *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6)    *Issues***

The appellant's statement of the issues in the brief is correct.

Art Unit: 2613

**(7)     *Grouping of Claims***

Appellant's brief includes a statement that claims 1-3 and 8 stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8)     *ClaimsAppealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9)     *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,440,337	HENDERSON et al	8-1995
5,508,734	BAKER et al	4-1996

Art Unit: 2613

**(10)    *Grounds of Rejection***

It is noted that claim 3 was finally rejected in a separate section 103 rejection from claims 1, 2, and 8, as shown in the Office Action dated March 15, 2001 (see Paper no. 17) and as similarly presented in the Examiner's Answer dated August 30, 2001 (see Paper no. 22). This was done to single out claim 3 as using the case law of In re Aller for support. However, for clarity and consistency, claim 3 is hereby grouped with claims 1, 2, and 8 under the section 103 rejection below in view of the combination of Henderson et al and Baker et al. Since the purpose of grouping claim 3 with claims 1, 2, and 8 is merely for clarity and consistency, no new grounds of rejection have been presented as shown below.

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1.      Claims 1-3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson et al of record (5,440,337) in view of Baker et al of record (5,508,734).

Henderson et al discloses a multi-camera closed circuit television system for aircraft as shown in Figures 1, 3, and 4, and substantially the same closed circuit television system for an aircraft (see Figure 4 and column 5, lines 4-7) as claimed in claims 1, 2, and 8, comprising

Art Unit: 2613

substantially the same at least one video camera (22, 24 of Figure 3) providing a field of view forward and downward from the aircraft's centerline (26, 28 of Figure 7 and see column 5, lines 7-15), the at least one video camera comprising a plurality of video cameras (see 22, 24 of Figure 3); and closed circuit television system for an in flight entertainment system for an aircraft (see Figure 4, column 5, line 4 to column 6, line 25), comprising in flight entertainment local area network providing video output and the in flight entertainment local area network connected to a video camera control module (see Figure 5 and column 5, line 4 to column 6, line 25).

Henderson et al does not particularly disclose, though, the followings:

- (a) a plurality of video display modules for selecting and displaying a selected video image; a video camera control module connected to the at least one video camera and the plurality of video display modules for receiving the digital video signal and providing a plurality of selected video images to the plurality of video display modules, respectively; and wherein the at least one video camera generates a digital video signal providing a plurality of video images and the at least one video camera comprises a video camera providing a plurality of fields of view from a single video frame as claimed in claims 1 and 2;
- (b) a plurality of personal control units, each of the plurality of personal control units corresponding to respective ones of the plurality of video display modules and connected to the video camera control module for operating the video camera control module to independently select a desired field of view for each of the video display modules as claimed in claim 1; and

Art Unit: 2613

(c) the in flight entertainment local area network providing audio output, and the in flight entertainment local area network connected to a plurality of video display modules and a plurality of personal control units as claimed in claim 1.

Regarding (a) and (b), Baker et al discloses a method and apparatus for hemispheric imaging which emphasizes peripheral content as shown in Figures 1, 6, and 8, and teaches the conventional video camera (10 of Figure 1 and see column 6, lines 27-31, lines 52-64, column 7, lines 16-18) for generating a digital video signal (see 60 of Figure 6, and column 12, lines 11-21) providing a plurality of video images and wherein the video camera provides a plurality of fields of view from a single video frame (see column 12, lines 6-8, column 13, lines 8-18); a plurality of video display modules (receive outputs from the RAMDACs 78 of Figure 8) for selecting and displaying a selected video image (see column 13, lines 8-31); a video camera control module (80 of Figure 8) connected to the at least one video camera and the plurality of video display modules for receiving the digital video signal and providing a plurality of selected video images to the plurality of video display modules, respectively; and a plurality of personal control units, each of the plurality of personal control units corresponding to respective ones of the plurality of video display modules (i.e., since image transformations such as pans, up/downs, zooms, tilts, rotations, etc. are being processed/controlled by either human or computer input operations within, for example, a video camera control module 80, such input operations provided via a personal control unit is being attached each of the video control modules 80, thus providing a plurality of personal control units corresponding to respective ones of the plurality of video display modules, see

Art Unit: 2613

column 12, lines 28-41 and column 13, lines 8-31) and connected to the video camera control module for operating the video camera control module to independently select a desired field of view for each of the video display modules (i.e., users are provided the personal control units connected to the video camera control modules 80 having the capabilities of selecting a desired image within the image transformation system as shown in Figure 8, see column 12, lines 6-8, lines 28-41, column 13, lines 8-31). Therefore, it would have been obvious to one of ordinary skill in the art, having the Henderson et al and Baker et al references in front of him/her and the general knowledge of closed circuit television systems, would have had no difficulty in providing the features of a digital camera system, a plurality of video display modules, a video camera control module, and a plurality of personal control units as taught by Baker et al for the closed circuit television system for an aircraft of Henderson et al for the same well known flight entertainment purposes of providing to passengers with the capability to individually select and/or control a desired field of view from an available multiple fields of view provided by a video camera as claimed.

Regarding (c), Baker et al teaches the conventional use of audio and video capturing functions within the imaging system (see column 9, line 35 to column 10, line 29). In addition, since Baker et al shows a plurality of video display modules and a plurality of personal control units (see Figure 8), it is considered obvious that such video display modules and personal control units may be provided within the in flight entertainment local area network system of Henderson et al. Therefore, it would have been obvious to one of ordinary skill in the art, having the

Art Unit: 2613

Henderson et al and Baker et al references in front of him/her and the general knowledge of audio/video connections and functions, would have had no difficulty in providing the audio/video features as well as the plurality of video display modules with the plurality of personal control units of Baker et al within the aircraft entertainment system of Henderson et al thus providing the audio and video output, and connection of the plurality of video display module and plurality of personal control units within the in flight entertainment local area network of Henderson et al for the same well known purposes as claimed.

In re Claim 3, it is considered obvious to provide the claimed numerical angle values for the video cameras and display since these values are merely optimum or workable ranges, and it is not invention to discover the optimum or workable ranges by routine experimentation. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to arrive at the desired numerical angle values to facilitate one's needs through routine experimentation. This opinion/view is supported by In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

#### **(11) Response to Argument**

Regarding the appellants' arguments at pages 8-9 of the brief filed August 16, 2001 concerning in general that "... However, Figure 8 of Baker et al does not identify any elements as personal control units ... Figure 8 of Baker et al shows a plurality of image processing subsystems 80, connected to a corresponding plurality of random access memory digital-to-analog converters (RAMDAC) 78, each of which are shown as having outputs to

Art Unit: 2613

displays. However, the random access memory digital-to-analog converters do not operate as personal control units for multiple users for independently controlling their own individual displays. Furthermore, no input is shown or disclosed as coming from the displays, so that the image processing subsystems would not operate as a plurality of personal control units for multiple users for independently controlling their own individual displays.”, the Examiner wants to point out that the Examiner is in agreement with the appellants that the random access memory digital-to-analog converters of Baker et al do not operate as personal control units for multiple users for independently controlling their own individual displays as stated by the appellants. Regarding the appellants’ arguments concerning that there is no input shown or disclosed as coming from the displays, the Examiner does not particularly understand such arguments. As shown in Figure 8 of Baker et al, each one of the RAMDACs 78 are provided to a respective display, thereby providing the connection/input. In any event, it is still however that since image transformations within Baker et al such as pans, up/downs, zooms, tilts, rotations, etc. are being processed/controlled by either human or computer input operations within, for example, a video camera control module 80, such input operations are provided via a personal control unit being attached to each of the video control modules 80, and thus providing a plurality of personal control units corresponding to respective ones of the plurality of video display modules (see column 12, lines 28-41 and column 13, lines 8-31 of Baker et al). In other words, each one of the displays shown in Figure 8 of Baker et al is being controlled by a respective user for providing the desired images, and since each user has the capabilities of

Art Unit: 2613

manipulating the images, personal control units are obviously being provided for the video control modules 80 for such manipulations. As such, it is submitted that the combination of Baker et al and Henderson et al renders the claimed invention obvious.

Regarding the appellants' arguments at pages 9-11 of the brief filed August 16, 2001 concerning in general that "... the data and control features of Baker et al also do not provide any teaching, disclosure, or suggestion of a "plurality of personal control units." ... it is explained that Baker et al relates to visual imaging system and techniques which provide electronic manipulation of wide angle hemispheric scenes, such as the multimedia technique used at theme parks, of displaying on a screen or collection of screen that covers almost 360 degrees field of view ... Nothing about the cited passage, or for that matter, any of the Baker reference suggest a plural of users having an individual control of assembling of images ... In fact, if a plurality of controls were allowed by Baker et al, with independent control by a plurality of users, it is completely unreasonable to conclude that such abutting subimages for a unified 360 degree field of view scene emphasizing details on the hemispheric periphery would be achieved ... ", the Examiner respectfully disagrees. Though Baker et al may involve visual imagings pertaining to the manipulation of wide angle hemispheric scenes in the multimedia environment, the constructing of abutting subimages, and among other visual imaging special effects, the critical issue at hand is that Baker et al, by providing image transformations by human input operation and selective displays of images on the display devices of Figure 8 (see column 12, lines 28-41 and column 13, lines 8-31), input operations are provided via a

Art Unit: 2613

personal control unit that is being attached to each of the video control modules 80. And since there are a plurality of video camera control modules 80 as shown in Figure 8 of Baker et al, there are an equal amount of personal control units connected to each of the plurality of video control modules for controlling the image transformations and selections via human or computer input. It is therefore submitted again that Baker et al shows substantially the same if not the same plurality of personal control units, each of the plurality of control units corresponding to respective ones of the plurality of video display modules and connected to the video camera control module for operating the video camera control module to independently select a desired field of view for each of the video display modules as claimed.

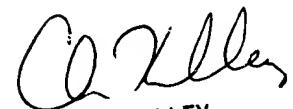
Art Unit: 2613

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
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PRIMARY EXAMINER

  
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